

# THE STRENGTHS AND WEAKNESSES OF EGYPTIAN CHRONOLOGY – A RECONSIDERATION

---

By *Kenneth A. Kitchen*

## INTRODUCTORY

§1. Unfortunately, as I could not attend the Vienna 2005 meeting in person, I know very little about my colleagues' papers, and therefore have had no opportunity to interact with them. However, they would hopefully have seen the first version of this paper (which I sent to Vienna), so I will leave most of any interaction to them. My task is simply to review critically the factual evidence that matters, and to propose close-fitting solutions that will help us to see this topic more clearly.

## 1<sup>st</sup> MILLENNIUM BC (664–c. 1070)

§2. The agreed starting-point has to be the 26<sup>th</sup> Dynasty and all that follows it. As ever, the only reliable way to attempt to calculate Ancient Near-Eastern dates (Egyptian included) is have a fixed point and to work back from it. The 26<sup>th</sup> Dynasty began in 664 BC, as is generally recognised. Before it, Taharqa of the 25<sup>th</sup> Dynasty has a clear reign of 26 years back to 690 BC, likewise, surely, to be accepted as a firm date.<sup>1</sup> His successor Tantamun thus acceded in 664, just in time to suffer the Assyrian onslaught on Egypt in 663 BC, and reigned coevally with Psamtek I; hence his impact on mainline Egyptian chronology is *nil*.

§3. Before Taharqa, we have Shebitku (Shabataka). The endless wrangling about the length of his reign can now be terminated, since the modern publication of the Tang-i-var inscription of Sargon II of Assyria, proving that "Shabataku, king of the land of Meluhha" was active in the Nile Valley in 706 BC. Inevitably, the text has been (superficially) misread, and thus misunderstood. Namely to the effect that Shebitku was king in Egypt from at least 706 BC, hence his predecessor Shabako (14 years, 13 in Egypt) ruled Egypt from c.720 BC or earlier, and hence all preceding rulers would also have to be dated correspondingly earlier.<sup>2</sup> The errors of comprehension are threefold. First, Meluhha is *Nubia (Kush)* and

NOT Egypt! In 706, Shebitku is being recognised as ruler of Kush, and NOT of Egypt. Second, the Assyrian *sharru* does NOT mean exclusively "king" in the sense of the supreme monarch over a sizeable domain, and certainly not always in relation to reports on foreign potentates (high or low) outside Assyria itself. The slightly later campaign-reports of Assurbanipal for Egypt make this crystal clear: everybody, from real kings (*e.g.* Pedubast II at Tanis) down to local Libyan chiefs and city mayors are all uniformly termed *sharru*, supposedly "king" – which 90% of them were not! In such Egyptian contexts, *sharru* should only be translated neutrally as "ruler", except when actual Egyptian sources prove that a real king (a *nsw-bit*) is involved. Thus, in 706, Shebitku should be regarded as Shabako's deputy, ruling in Kush, while the senior man – Shabako – was the real king ("pharaoh") in Egypt proper, from 715 BC, when he himself took over Egypt. Third, recorded as (U)shilkanni, Osorkon IV was still in office in 716 when he sent gifts to Sargon II, just *before* Shabako came north in 715 and ended the reigns of Bakenranef and most likely also of Iuput II and Osorkon IV, in order to become sole and undisputed pharaoh in all Egypt.

§4. There was, of course, excellent reason for this proceeding. Long before, the New-Kingdom pharaohs of Egypt found it impossible to rule both Egypt *and* Kush in person all the way from the Mediterranean coast well over 2,000 miles (well over 3,200 km) to Napata and the 4th cataract of the Nile. The 25<sup>th</sup> Dynasty had exactly the same problem, albeit technically in reverse. We too easily forget that *nobody* then had mobile phones, jet aircraft or any form of fast communication – it took up to 3 weeks to sail from Memphis to Thebes alone, and surely up to 3 months to go from Memphis to Napata – or, 6 months (half a year!) to send up and have a reply! So, devolvement of local authority was essential as much in the 25<sup>th</sup> Dynasty as in the New Kingdom.

---

<sup>1</sup> Full details in *ThIP-3* [the revised 2<sup>nd</sup> ed.], 1996, 161–163, §§130–131.

---

<sup>2</sup> See, for example, D. KAHN, *Orientalia NS* 70(2001), 1–18, for a clear presentation on this basis.

Pi(ankh)y would not do this, so he in practice abandoned all of Egypt after his great campaign except for religiously important Thebes-to-Aswan, closest to his southern domains.

This, in turn, settles another old problem. In 701, during his Palestinian campaign, Sennacherib is said to have had to watch out for “Tirhaqa, king of *Kush*” (2 Kings 19:9; Isaiah 37:9). *Kush*, may I emphasize, NOT Egypt! Which is how almost all commentators have stubbornly misunderstood it (myself included). In 701, Shebitku ruled Egypt, and Taharqa was *his* Nubian lieutenant, precisely as Shebitku himself had been for Shabako. There was thus a clear, practical Kushite policy for ruling their vast twin realm effectively – and that twice over, on Assyrian and West-Semitic data that are together consistent.

§5. As for Shebitku, his reign should indeed be allowed the full 12 years,<sup>3</sup> from 702, that would have allowed him to plan his intervention against Assyria (cf. Kawa Stela IV, Taharqa bringing troops from Nubia to Egypt at S’s behest) the following year, when he sent out Taharqa with the Egypto-Nubian forces. Outside of 701, there is (so far) *no* other known occasion during Sennacherib’s reign (all the way down to his death in 681) for such a political conjunction.

This essential digression then clears the way to assign – as previously – Shabako’s 14/13 years in Nubia and Egypt to 716/715–702 BC. No change is remotely needful here. As the 24<sup>th</sup> Dynasty (whom he evicted in the person of Bakenranef) was wholly contemporary with the 22<sup>nd</sup>/23<sup>rd</sup> Dynasties, it is largely irrelevant to the main stream of chronology, bringing us to the Libyan dynasties and their problems.

§6. The 22<sup>nd</sup> Dynasty divides into 2 groups of rulers, with (i) a weak point in the middle, and (ii) some minor inserts (but not too many!) For the latter half, we have the sequence of Apis-bulls, whereby the one installed in Year 28 of Usimare Shoshenq Si-Bast (“Sh. III”) died in Year 2 of Usi-

mare Pimay 26 years later. That Shoshenq reigned into a Year 39; leaving some 14 years between then and Pimay’s accession. Then, Pimay reached a Year 6. A further Akheperre Shoshenq (>”V”) “son of Pimay saw another change of Apis-bulls in his Year 11 (after 15 years), then in his Year 37, another change of Apis-bulls, and finally one that died in Year 5 of Bakenranef, its burial being completed by Shabako. This sequence of rulers, Shoshenq III to V, is clearly fixed by these data.<sup>4</sup> Within the 26 years’ lifespan of the Shoshenq III to Pimay Apis, it now seems clear that we must insert a “new” Hedjkheperre Shoshenq Son of Bast, God, Ruler of Heliopolis, who should be numbered “IV”, as he comes neatly between the existing III and V. This “new man” reached a 10<sup>th</sup> year, which fits well inside the interval available.<sup>5</sup>

After Shoshenq V, Pi(ankh)y invaded Egypt (in his own 20<sup>th</sup> year, celebrated in the 21<sup>st</sup>), and found as Shoshenq V’s successor in the 22<sup>nd</sup>-Dynasty home-fief of Bubastis (and therefore also Tanis) a king Osorkon (IV<sup>th</sup>, when we allow for an Os. III in the 23<sup>rd</sup> Dynasty, cf. below). The totality of the known monuments suffices to prove that this ruler was an Akheperre Setepenamun Osorkon Meriamun, with a royal lady (Tadibast) as his mother or his queen, that also indicates he was distinct from any other king Osorkon.<sup>6</sup> The regnal years of Tefnakht (as king after Pi(ankh)y’s invasion) and Bakenranef at 7/8 and 5/6 years respectively give 12 (min.)/14 (max.) years for the two, before 715 BC and the conquest by Shabako, hence a bottom date of 727 (min.) to 730/29 (max.) for Pi(ankh)y’s irruption, say 728 as average of the two (or up to 730, see further §14 below). Again, it is unlikely that Osorkon IV became king only 5 minutes before he had to rush off and submit to Pi(ankh)y in c. 728 (min.), so we may set his rule from c. 730 BC, minimally, or slightly earlier. A minimum reign of c. 15 years or slightly more for Osorkon IV, c. 730+–715 BC, also fits with his being the So of 2 Kings 17:4, appealed-to by Hoshea of Israel in c. 726/725 BC,

<sup>3</sup> Eusebian version of Manetho; plus an Apis-bull, c. 16 years, Shabako Year 14 to early under Taharqa; cf. *ThIPd*, p. 156, §(iii).

<sup>4</sup> See the sources as cited with references, in *ThIPd-3*, 100–104 *passim*.

<sup>5</sup> See discussion, *ThIPd-3*, 1996, xxv–xxvi with refs.; dates, BROEKMAN, *GM* 205(2005), 25.

<sup>6</sup> Cf. latterly, H.D. SCHNEIDER, *Mélanges Gamal Eddin*

*Mokhtar*, II, Cairo: IFAO, 1985, 261–267, figs. 1–2 and plate I. The relief-fragment clearly has him as an active decorator of some temple at Bubastis or Tanis; its technique is comparable with (but slightly inferior to) that of blocks of Shoshenq V at Tanis (cf. P. MONTET, *Le lac sacré de Tanis*, Paris: Imprimerie Nationale, 1966, pls. 47:29, 48:40, 49:53, 51:74, 52:89).

and also the (U)shilkanni who grovelled to Sargon II in 716 BC. As a result, we can *nach wie vor*, minimally put 37 years of Shoshenq V at c. 767–730 BC, 6 years of Pimay at c. 773–767, then max. 13 years for the new Shoshenq IV at c. 786–773, and the basic 39 years of Shoshenq III at c. 825–786 BC, minimally. There is no absolute need to change this basis for the later 22<sup>nd</sup> Dynasty – “don’t mend what ain’t broken!” is homely but sound advice in such a case.

§7. Likewise, we have a sequence for the early part of this Dynasty. The famous Pasenhor stela gives a clear sequence of Shoshenq I (son of a commoner) > Osorkon I > Takeloth I > Osorkon II. This sequence is mirrored in part in various priestly genealogies from Thebes. Cf. the sequence Shoshenq I (Hedjkheperre), Osorkon I (Sekhemkheperre), and then (missing the short lived Takeloth I) an Osorkon II (Usimare; & Si-Bast in nomen), as in the genealogy of the 4<sup>th</sup> Prophet DjedThutefankh (*ThIPd-3*, 217–221 for data). Thanks to the perspicacity of our good colleague Jansen-Winkel, we find this Osorkon II bewailing his father, a Hedjkheperre Takeloth (I) Meriamun at Tanis (refs., *ThIPd-3*, xxii–xxiii), so we have proper titles from Shoshenq I to Osorkon II inclusive (first half of Dyn. 22) as well as for Shoshenq III to Osorkon IV in the second half of the Dynasty. Not included in the sequence from either Pasenhor or any other source is a king Heqakheperre Shoshenq (II?), known exclusively from his rich burial (reburial?) in the tomb of Psusennes I at Tanis. That this is actually Shoshenq I buried under another name is theoretically possible, but highly doubtful; no reason for such an act is evident. As nothing in the burial postdates the early 22<sup>nd</sup> Dynasty, he may have been a co-regent of Osorkon I (and dying before the latter). See full discussions in *ThIPd 1-3*, long since. The reign-lengths of Shoshenq I to Osorkon II inclusive are well-known within close limits (so far...). Shoshenq I’s Year 21 may have been a full 21 years (cf. Manetho), dying in Year 22; a Year 33 bandage-date found in a Theban burial with braces naming Osorkon I suggests that the Manethonic 15 years is changed from \*35 years; and an associated Year 3 could be of his co-regent(?) Shoshenq II or of his successor,

Takeloth I. To the latter belong Nile-level texts of Years 5 to 13 or 14, left by his contemporaries and brothers the high priests of Amun, and a stela of Year 9 (cf. *ThIPd-3*, xxiii and refs.; a minimum of 13/14 years (or up to 15) seems indicated – Manetho’s [misplaced?] Takelothis is given 13 years. For Osorkon II, we have 23 years, but 24 probably the minimum (cf. *ThIPd*, p. 108), and he may have reigned longer – see further, §16 below.

§8. It is also possible to give close dates for these kings, using one or both of two options. (i) Hitherto, a king Takeloth (II Si-Ese; prenomen, Hedjkheperre) with a son and Theban Amun’s high priest, Prince Osorkon, and 25 years’ reign to his credit, has been accepted within the 22<sup>nd</sup> Dynasty at this point, between Osorkon II and Shoshenq III. Chronologically, this is clearly indicated (a) by the career of Prince Osorkon running in his own ‘chronicle’ through from Years 11, 15, 25 of Takeloth II to Years 22–29 and (in other texts) 39 of Shoshenq III. Before all that, Prince Osorkon was son of Takeloth II by Queen Karomat D, daughter of Nimlot C who had been the previous high priest of Theban Amun, and son of Osorkon II. On this impeccable basis, Takeloth II *does* belong between Osorkon II and Shoshenq III (with or without coregencies), while his son Prince Osorkon dated *exclusively* by the 22<sup>nd</sup> Dynasty ruler Shoshenq III after his own father Takeloth II. So, there is NO *a priori* reason to doubt that Takeloth II belongs to the 22<sup>nd</sup> Dynasty, at its median point. Anywhere else is excluded.<sup>7</sup> (ii) On such a minimal sequence, of 21 + 34 + 13 + 24/25 + 25 years respectively for Shoshenq I, Osorkon I, Takeloth I, Osorkon I, and Takeloth II, totalling some 120 years, this figure added to c. 825 BC for the accession of Shoshenq III, brings us to approx. 945 BC for the accession of Shoshenq I and the 22<sup>nd</sup> Dynasty, *regardless of any other reckoning*. Apart from Assyrian support for the 12-year reign of Shebitku, Egyptian chronology at this point stands clearly on its own resources, back from 664/690 BC all the way back to 945 BC. The Near-Eastern links with Osorkon IV (So in 726/5, (U)shilkanni in 716) confirm the dating from our Nile valley data. Going back further, Shishak = Shoshenq I raided Palestine in the 5<sup>th</sup> year of Rehoboam king of

<sup>7</sup> Including Heracleopolis (JANSEN-WINKELN, *SAK 27* (1999), 137), seeing that we have a continuous series of governors there c. 865–720 BC (*ThIPd-1/2/3*, 485, table 16); so, no room there for T. II in c. 850–825!

Judah (1 Kings 14:25); reckoning down from 931/930 BC, date of the division of the Hebrew kingdom; that notable event can be set at 926/925 BC, as it is possible to establish Hebrew monarchic dates from 931/930 down to 841 BC, thanks to exact correlations with Shalmaneser III of Assyria. The year 926/925 BC would coincide with about Year 20 of Shoshenq I, and so his accession be in 945 BC – precisely as with the Egyptian data dealt with above.

This fits well, because he undertook his vast works at Karnak (forecourt, “Bubastite Gate”, triumph-scene and Palestinian toponym-list) in Year 21 (Silsila stela of Horemsaf), and evidently died in Year 22, the works being left largely unfinished. Therefore, it is very unwise to place Shoshenq I’s Palestinian campaign much before his Year 20. Pushing it back to Year 19 (=acc. 944) is possible, but why a year’s delay to begin building? Going back to Year 18 (= acc. 943) is even less likely with two years’ delay before building. We must not forget that Shoshenq was no callow youth at his accession (probably nearer 40 than 30), and hence near to 60 when he invaded Palestine. Thus, on return, in that age-bracket, he would lose no time in launching his ambitious “imperial’-looking building-programme, to overawe the critical Thebans, and (as Osorkon I’s spending shows), when flushed with enough resources to build extravagantly in Thebes, Memphis and Teudjoi (El-Hibeh). So, we should stay at or near Year 20 for the campaign, and close to 945 (possibly 944) for practical reasons.

Later in the 22<sup>nd</sup> Dynasty, in 853 BC, Egypt sent troops to support the Levantine rulers (including Ahab of Israel) against Shalmaneser III; it is no coincidence that a presentation vessel of Osorkon II was found at Samaria in the royal palace; Ahab reigned c. 875/4–853/2, while on reigns given just above, Osorkon II would have reigned (24/25 years min.) c. 877–852 BC – a remarkably close overlap, it so happens. Thus, our Egyptian and Near-Eastern sets of dates – almost wholly independently! – fit together excellently all the way back from 664/690 BC to c. 945 BC. In this impeccable context, it is entirely natural to set Takeloth II as the middle link between the early 22<sup>nd</sup> Dynasty (Shoshenq I–Osorkon II) and the later 22<sup>nd</sup> Dynasty (Shoshenq III–Osorkon IV). It would require very strong evidence indeed to prove otherwise. And none is forthcoming. For some attempts, see §10ff. below. Before reviewing these, we must first review the

essentials of the 23<sup>rd</sup> Dynasty, as a chronological complement to the 22<sup>nd</sup>.

§9. The monumental evidence reveals a second set of Libyan-period kings who – beyond all doubt – were contemporaries of the mainline 22<sup>nd</sup> Dynasty, and sprung from it, family-wise. We have a king Usimare Pedubast (I), in whose Years 5, 8, 18, 19 one Harsiese (B) was high priest of Amun; by Year 23 of Pedubast a new high priest Takeloth (E) had succeeded him. The year 5 of Pedubast mentioning Harsiese (B) is equated with Year 12 of another (unnamed) king. In the genealogy of the Theban Nebneteru family, Pedubast comes in a generation also contemporary with Shoshenq III, but following that contemporary with Osorkon II (earlier) and ahead of the next generation dating by an Osorkon III (for whom, see just below). He was therefore a possible contemporary of Takeloth II and certainly of (early?) Shoshenq III. Thus, if the Year 12 = Year 5 of Pedubast I should be attributed to Shoshenq III, and the accession of Pedubast (his Year 1) occurred in Year 8 of Shoshenq III. This cannot be Years 8 and 12 of any later king, because the later kings and high priests could not then be fitted in between Pedubast’s accession and the invasion of Pi(ankh)y in c. 728 BC (min.) as we shall see. Nor can it be under Takeloth II, when Nimlot C officiated just before Prince Osorkon, and Osorkon (not a Harsiese!) was Takeloth’s choice. Thus, if Year 8 of Shoshenq III (acc. 825, §6 end, above) was in c. 818 BC (min.), then that would also be the accession-date of Pedubast I – and of Manetho’s 23<sup>rd</sup> Dynasty. Shortly before that date, in an explicit Year 6 of Shoshenq III, we find the first mention of Harsiese (B) as Theban pontiff; thus, he had at least 25 years in office from that Year 6 to Year 23 of Pedubast I.

However, that Year 6 of Shoshenq III (and the deliberately anonymous Year 12) is *the last time that any Theban dignitary dated any event by the years of the 22<sup>nd</sup> Dynasty*. This fact cannot be overstressed. After that point, the Thebans dated *exclusively* by the parallel 23<sup>rd</sup> Dynasty, until Pi(ankh)y took over the Thebaid, c. 730/28 BC; after which time, datelines of his began to appear. The only man to date by the 22<sup>nd</sup> Dynasty after Year 12 of Shoshenq III was its lonely supporter, Prince Osorkon. There is no rational reason to doubt that our Usimare Pedubast is also Manetho’s founder of the 23<sup>rd</sup> Dynasty, assigned 25 years – so close to our attested Year 23, that it should be accepted (as is normally done). In

Years 15–16, he had a coregent, Iuput I, of whom nothing more is heard. His actual successor was certainly an Usimare Meriamun Shoshenq, in whose 6th year the high priest Takeloth appears, already attested in Year 23 of Pedubast I, giving that pontiff at least 8 years in office. As we now have Shoshenqs I–V in the 22<sup>nd</sup> Dynasty, the logic of the situation demands that we here merely reverse the Latin ciphers I+V (of “old” Shoshenq IV) to give us V+I, for this king as now to be reckoned as Shoshenq VI. This will give a sequence in this same Dynasty later, for yet one other Shoshenq (VII), if not another (\*VIII).

In the genealogies, an Usimare Osorkon Si-Ese, with a mother Tentsai distinct from Kapes, mother of Osorkon II Si-Bast (also an Usimare), occurs in the generation which followed that of Pedubast I. Of this king, we have dates up to Year 28, possibly 29; as has long been known and accepted, he had a co-regent and successor, Usimare Takeloth (III) Si-Ese, formerly high priest in his father’s reign. Takeloth III had 7 known years, 5 as co-regent, hence a minimum of 2 years’ sole rule (probably enough). After him, a king Rudamun – with no explicit datelines known. In Pi(ankh)y’s time, when he invaded Egypt, he found two Delta kings: the senior, Osorkon (IV) of Bubastis, and a second, a Iuput II at Ta-remu. As Osorkon IV is clearly of 22<sup>nd</sup>-Dynasty lineage (at Bubastis, in touch with Israel and Assyria, at the nearest point for their envoys – which implies Tanis), so equally one must insist that this Iuput II (named in imitation of Iuput I of Dyn. 23!) is the last known scion of the parallel 23<sup>rd</sup> Dynasty. In 730/28, there were NO other Delta kings; the other two kinglets (Nimlot and PeftjauawyBast) lived far away in Middle Egypt. Iuput II has a Year 21 to his credit, and is the last known of his line. If, with Bakenranef and Osorkon IV, his regime too disappeared in 715 under the all-conquering impact of Shabako, then Iuput II’s accession would go back at absolute minimum to c. 736/735.

If we compute this Dynasty so far, we have 25 + 6 + 28 + 2 years (minimum) from Pedubast I to Takeloth III inclusive. These 61 years would run from 818 BC (min.) down to 757 BC, leaving about 22/21 years down to Iuput II, acc. c. 736/735 BC. Some 22 years for the ephemeral Rudamun (or even a few extra years for Takeloth III) seems over-generous. And, in fact, we now have a new king to fill this gap. For data on this welcome newcomer, and his great kindness in

sharing with me his data thereon and in showing me his paper forthcoming in SAK 33, I am greatly (and gratefully) indebted to Dr. G.P.F. BROEKMAN, to whom we also owe a good precis of the arguments proffered in favour of eliminating Takeloth II from Dyn. 22, in *GM* 205 (2005), 21–33. The Wadi Gasus graffito, with Year 12 and a God’s Wife Amenirdis, and Year 19 with the God’s Wife Shepenupet, would now possibly refer to Year 12 of Pi(ankh)y, and then Year 19 not to Iuput II but to the new Shoshenq VII (Si-Ese). Then, if the latter reached his \*20<sup>th</sup> year, with 19 full years, our previous 2 years for Rudamun would fall in 757–755 BC, and the reign of Shoshenq VII in 755–736 BC, with Iuput II neatly in 736–715 BC, as given in Broekman, *GM* 205 (2005), 25. The datings are close but perfectly feasible (but adjusted, below). The 23<sup>rd</sup> Dynasty was one consistent line of rulers, precisely as both Manetho and the monuments in unison *both* require. *Where* they officiated is an entirely separate issue.

§10. However, in recent years, some have sought to reject the above impeccably straightforward and fully satisfactory solution for the 22<sup>nd</sup> and 23<sup>rd</sup> Dynasties for a miscellany of reasons. As has been shown already elsewhere (*ThIPd*-3, xxiii–xxxiv), almost none of the reasons proffered can be shown to be binding. Nevertheless, it is only proper (however briefly) to do two things. (i) To show – again – why the normal scheme *is* perfectly sufficient, and the contrary “reasons” are needless. But (ii) to explore whether, in fact, adjustments are feasible in the mid-22<sup>nd</sup> Dynasty to eliminate the supposed problems in a *positive* fashion. If so, then we would attain to an alternative chronology for the middle of the 22<sup>nd</sup> Dynasty, affecting mainly Osorkon II and Takeloth II, but very little for anyone before or after them, thanks to the clear successions, relatively good regnal data, and firm additional controls imposed by the Near-Eastern data.

§11. First of, all, very tersely, the arguments for change from Osorkon II to at least early Shoshenq III. We enumerate as follows:

(1) The desire to equate Prince Osorkon (son of Takeloth II) with the later king Osorkon III of the 23<sup>rd</sup> Dynasty. I am criticised for a chronology that would make Prince Osorkon c. 71 years old in Year 39 of Shoshenq III; but this is not impossible – compare another man (Nebneteru iii, *ThIPd*, 212, n. 102) who lived to be 96 years old! This would not be very common, but it

makes Prince Osorkon (even at 71) young in comparison! Furthermore, eliminating Takeloth II's reign from the 22<sup>nd</sup> Dynasty does NOT improve Prince Osorkon's chances of becoming the Osorkon III who reigned for 28/29 years. Even at 51 at \*accession, he would reach 80 – possible (cf, just above) but rather exceptional. Far better he die at c. 72 on my chronology (Shoshenq III, Year 40)! As Broekman also realises now,<sup>8</sup> the whole idea that (i) Takeloth II sat powerless in Thebes while the Thebans insulted him by repeatedly barring his son and heir Prince Osorkon from office there and that (ii) then these very same Thebans miraculously welcomed this very same man once he took car-touches as king Osorkon (III), only *the very next year* after he had (in Year 39, Sh. III)) descended on Thebes breathing fire and slaughter on his opponents – this is, and remains, a near-impossible scenario; see *ThIPd-3*, xxiv §W end, and xxxi, §BB. There are better reasons than this outdated concept, for any change of reigns here.

(2) That Takeloth II has no burial now in Tanis nor monuments there (yet...) is of no consequence whatsoever. *None* of the kings Shoshenq I, Osorkon I, Pimay, Shoshenq V, or Osorkon IV have known burials or tombs there either (as yet...), but this does not disqualify them from their sequence in the 22<sup>nd</sup> Dynasty! This remains a wholly valid point. As remarked already, Takeloth II is linked by marriage *firmly* with the line of Osorkon II, while his son Prince Osorkon absolutely shunned the 23<sup>rd</sup> Dynasty, dating *always* by the 22<sup>nd</sup>! On such clear grounds, he and his father are by no means either 23<sup>rd</sup> Dynasty or regular residents in Thebes.

(3) The epithet Si-Ese (even as studied by Muhs) proves *absolutely nothing* about the location of kings or dynasties. Pedubast I, actual founder of the 23<sup>rd</sup> Dynasty, was Si-Bast, not only Si-Ese (an epithet invented by Takeloth II, to distinguish himself from Takeloth I). Si-Ese only became a fixed epithet for Dyn. 23 quite *late* – Osorkon III onwards. And it is *not* a Theban title per se. Quite the contrary. In Year 21, Shoshenq I was sitting in “the residence of Per-Ese, the Great Spirit (*ka*) of Re-Harakhti”, when he decreed his great quarrying and building-works that year.<sup>9</sup> The striking

epithet “Great Spirit of Re-Harakhti” is otherwise unique to the long-defunct Pi-Ramesse, only a few miles south of Tanis. It would seem that the new (22<sup>nd</sup>) Dynasty had annexed both that district and its defunct city's former epithet, for a royal estate (and country palace) in the name of Isis, as a dependency of Tanis. Here is the Isis of Takeloth II – in home territory, near Tanis! Again, at Leontopolis (Ta-remu), home of the last 23<sup>rd</sup> Dynasty king, Iuput II, close to his capital (Tell Moqdam/Ta remu) is Mit-Ya'ish, whence came a stela of Osorkon II whose divinities included Hor-Merti of Shedenu and mighty Isis, Lady of Shedenu, deities of Horbeit further east.<sup>10</sup> So we again have Isis in the home territories of both the 22<sup>nd</sup> and 23<sup>rd</sup> Dynasties.

(4) There was no “special relationship” between Takeloth II and Thebes; only 2 daughters of his married there; links were much more varied with (*e.g.*) Shoshenq I (definitely a northern king!) and Takeloth III. The idea that Takeloth II's queen Karomat D was Theban has been scotched by BROEKMAN (*GM* 205 (2005), 22–23), and likewise other supposedly special southern links (*ibid.*, 23).

(5) The attempt to assign 40/45 years to Osorkon II because of the successions of office-holders in his reign is a needless error, because tenure of office is frequently far *less* than a generation; see already *ThIPd-3*, xxv. Osorkon II may well have reigned longer than 24 years (as suggested below), but a 20-year gap with no monuments whatsoever is unacceptably artificial.

(6) “Gaps” in the series of Nile-level records at Karnak (cf. BROEKMAN, *op. cit.*, 28–30, table 1). Our friend would object to the gap of no Nile-level records at all for the entire 25-years' reign of Takeloth II, if he was sole ruler that long; therefore his sole reign is illusory. However, negatives often prove nothing. And there are damning parallels for this phenomenon. What about the 22-year gap with no Nile-level texts between Years 6 and 28 of Osorkon III? A whole 22 years, and no text! Almost as bad as with Takeloth II. Again, what about the 26-year gap in these records from Year 9 of Taharqa to Year 10 of Psamtek I? Every bit as “bad” as the 25 years of Takeloth II. What about the 26-year gap between Year 6 of Shoshenq

<sup>8</sup> *GM* 205 (2005), 23/24.

<sup>9</sup> Published by R.A. CAMINOS, *JEA* 38(1952), plate XIII: 39–40, and 50 end, 55 (obsolescent note).

<sup>10</sup> Published by G. DARESSY, *ASAE* 22(1922), 77; cf. P. MONNET, *Géographie de l'Égypte ancienne*, I, Paris, 1957, 134.

I and Year 12 of Osorkon I? And there may be another 20 year gap within the reign of Shoshenq VII. So, this kind of argument is inherently worthless. It is clear that such records were not carved annually; they were only done on particular occasions for reasons not now certain. Hence, this is *not* a reliable indicator.

(7) Different spellings of *Hapi* (BROEKMAN, *GM* 205, 32; *JEA* 88 (2002), 163–178) may be the product of varying scribes, rather than chronological fashions; hence, they are not definitive proof without other evidence. Thus, either Osorkon II or III are theoretically possible.

(8) It is an error to insert Sehetepibenre Pedubast II for 10 years into the later 22<sup>nd</sup> Dynasty between Shoshenq V and Osorkon IV, for two good reasons. First, the title-style of Pedubast II is *wholly foreign* to that period – Sehetepibenre is the style of later 7<sup>th</sup>-century kinglets, NOT of the outgoing Libyan 22<sup>nd</sup>/23<sup>rd</sup> Dynasties with their endless repetitions of the three prenomen Hedjkheperre / Akheperre / Usimare. Second, Pedubast II is undoubtedly the ruler of Tanis c. 670 BC, and the anti-Assyrian prince along with Inaros whose fame was such that he was still celebrated 1000 years later in the Demotic tales on this theme.<sup>11</sup> Thirdly, and damningly, there is no room chronologically for this kinglet at this point. The Apis-bull that was inducted in Year 37 of Shoshenq V did not die until Years 5/6 of Bakenranef. The reigns of Bakenranef and Osorkon IV probably both ended in 715 BC in Shabako's conquest of Egypt then; hence, this bull lived through the (incomplete?) Year 38 of Shoshenq V, and the entire reign of Osorkon IV whose last six years were contemporary with the entire reign of Bakenranef. On my normal dates, with 15 years for Osorkon IV (c. 730–715), that bull lived c. 16 years – the norm for that epoch! If one gives Osorkon IV up to 20 years (from c. 735), that bull would still only live c. 20 years, well within normal limits (up to 19 years even under the Ptolemies). But if we “do an Aston”, with 10 years for Pedubast II (745–735) plus 20 years for Osorkon IV (735–715), as cited by BROEKMAN (*GM* 205 (2005), 25) we then have the life of this unfortunate Apis-bull stretched out to over 30 years! No way!!

(9) The question of “generation-jumps”. Unlike the other eight items noted above (and a few more), this is in fact the only serious argument for attempting to overlap Takeloth II with Shoshenq III (and in consequence, lengthening the reign of Osorkon II to compensate). But the idea that the whole concept of a “generation-jump” as somehow abnormal<sup>12</sup> is itself a major conceptual error. At no time does an entire generation in a country's population mechanically get born at the same moment, then grow up to marry (say, aged 15/20) at one and the same time, then have a clutch of kids within (say) 5 years all at the same time, and eventually debase neatly at 50/65 all at the same time. Mass births, mass weddings, mass births, mass funerals! No. Within a population there are people of *all* ages all the time. Naturally, they commonly team up at roughly compatible ages; but many exceptions occur, for many reasons. Furthermore, down to 100 years or less ago, even in western Europe, couples had far more children than is common today; 7 children or so were nothing unusual; anciently compare the numerous offspring (*e.g.*) in Theban tomb-scenes or on Deir el-Medina family monuments. Let me illustrate from my own family history. During c. 1900–1920, my paternal grandparents had 7 children (5 sons, 2 girls), the last (a boy) born c. 1920. I was born to the 3<sup>rd</sup> son in 1932 – which meant that (to me) my Uncle Arnold became an uncle as a teenager at c. 12/13! Not in his 20s or over, as one might conventionally expect. He in turn married in the late 1940s, so in the early 50s I (in mid/late teens) was uncle to his son. And all sorts of jumps of various kinds are to be expected, depending on circumstances. My parents married late (in my mother's case, also late births of sons); she was born in 1896 (just before Queen Victoria's 2<sup>nd</sup> jubilee), whereas I had my (coming-of-age) 21<sup>st</sup> birthday in Queen Elizabeth II's coronation year (1953) nearly 60 years later. So, we must *not* apply mechanical concepts to antiquity, either. Then as now, all would depend upon particular family circumstances, normally well beyond our knowledge. For this reason, the “jumps” argument is inherently so riddled with multiple possibilities

<sup>11</sup> See K. RYHOLT, in: J.G. DERCKSEN (ed.), *Assyria and Beyond, Studies presented to Mogens Trolle Larsen*, 2004, 483–510, esp. 486; the identification of Esarhaddon in these texts is certain; cf. *ibid.*, 484–485.

<sup>12</sup> Cf. the eloquent presentation by BROEKMAN, *GM* 205 (2005), 26–27, who had considered just three such “jumps” to be far too common. In practice, probably not nearly common enough!

that it is virtually useless. In a population of perhaps half a million or more, they would have been relatively commonplace, depending on the circumstances in particular families.

In short, our chronology can largely disregard this phenomenon; and my basic chronology with a 25-years' reign for Takeloth II between Osorkon II and Shoshenq III is perfectly OK. (As long as we cease making the sort of mistakes refuted above and in *ThIPd-3*.) It certainly meets its international obligations perfectly. Change for change's sake is a bad criterion for studying chronology, I may add.

§12. But, in all fairness, we must *also* investigate if an adjustment *can* profitably be made to the dating of the 22<sup>nd</sup>/23<sup>rd</sup> Dynasties within the practical constraints of c. 945–715 BC, our realistic framework. If so, then maybe internal improvements *can* be made, without running into the sort of mistakes dealt with above and previously. If such an investigation of a possible “point of weakness” provides a better result, then we all will gain; if it proves fruitless, then we should stay where we were, and should stop chasing novelty for novelty's (deceptive) sake. It is better to be bored and correct than have an exciting new theory and be hopelessly wrong. We are *not* part of the entertainment industry! So, let us see what we find. The tables in Excursus I will be found helpful for what follows.

§13. First, any overlap suggested between Takeloth II and Shoshenq III *cannot* go later than Year 22 of Shoshenq III, from when Prince Osorkon dates exclusively by the latter king. So long as his father lived, he dated by him – only after Takeloth II's death was Prince Osorkon compelled to date by Shoshenq III (to avoid the 23<sup>rd</sup> Dynasty and its adherents – his foes!) This has one immediate consequence: the total 25-year reign of Takeloth II CANNOT be fitted inside the first 22 years of Shoshenq III. On plain arithmetic, 25 does not go into 22! So, either the first 3 or 4 years of Takeloth II's reign were independent after the death of Osorkon II (whenever that was), or else he began as a late coregent of Osorkon II.

Second, it is not good enough just to play games with numbers. We need to be able to say *why* one king overlapped with another at any particular juncture. We need *real* political situations to justify the choices considered. In what follows, we will seek to give realistic circumstances for the possible overlaps endorsed or suggested, or

changes in reign-lengths – NOT treat these as simply arbitrary number-games.

§14. Let us begin with a widely-accepted datum. As noted above, the 5<sup>th</sup> year of Pedubast I is equated with an anonymous Year 12 (Nile level text No. 24), and therefore his Year 1 and accession in a Year 8. This cannot be any later than Shoshenq III, because we have a series of other (Dyn. 23) kings after Pedubast I and before the invasion by Pi(nkh)y of Kush, who ran in parallel with Dyn. 22's Shoshenq III–V, and themselves total about 107 years alongside the c. 112 years for Dyn. 22 then. This has the result (as established long since, and still accepted, *e.g.*, Broekman, 29, No. 24) that Pedubast I began his reign and his Dynasty in Year 8 of Shoshenq III, in the late 9<sup>th</sup> century BC (detailed dates, below). What is more, Usimare Pedubast is well attested at Karnak (Years 7–23 *passim*), and in Theban genealogies, where he comes after Osorkon II, contemporary with Shoshenq III (cf. *ThIPd-3*, 131, 211), and before Osorkon III.

But what *right* had Pedubast I to take royal style? “He who buries inherits” is the key; a king buries his predecessor. Pedubast certainly did not bury Shoshenq III – but he may have participated in the funeral of Takeloth II. We may suggest that Takeloth II died (in his own Year 25 or \*26) in Year 8 of Shoshenq III – giving us almost a decade's overlap (quite enough), and Pedubast I used his role at this funeral to claim to succeed him alongside Shoshenq III. The latter may not have approved; hence Pedubast I moved out of Tanis, and set up court elsewhere (probably at Leontopolis). Pedubast I's 25 years (including an ephemeral coregent, Iuput I) were followed by the 6 years of Shoshenq VI, then 28 years of Osorkon III, 2 or 3 years of his coregent Takeloth III, a brief reign (5 or 6 years?) of Rudamun, and (now) by at least 19 years of the new Shoshenq VII (20 years would be less cramped). All this happened before the invasion of Egypt by Pi(ankh)y sometime about 728 as noted already. Thus, the pre-invasion 23<sup>rd</sup> Dynasty would total about 25 + 6 + 28 + 2 + 5 + 20 years (>86 years) before the accession of Iuput II and Pi(ankh)y's invasion. In turn, Iuput II reached a Year 21, and should be given that full year, probably being ousted in Year 22 by Shabako in 715 BC. In this way, the entire 23<sup>rd</sup> Dynasty can be set minimally in the years 822–715 BC. Year 19 of Shoshenq VII (Wadi Gasus, Shepenupt I) would then fall in 738, along with Year 12 for Pi(ankh)y, (Wadi Gasus,

Amenirdis I). If that is so, then his campaign in Year 20 some 8 years later would fall in 730 BC – an amelioration from c. 728 as offered above. Pi(ankh)y went back to Nubia; and as he did not repeat his campaign in 729, but left Egypt to its own devices, Tefnakht then realised this fact, and (probably) had 8 full years as king, which would cover from 728 to 720 BC, with Bakenranef's 5 full years (into a 6th) in 720–715 BC.

§15. Thus, we have Dynasties 23/24 into incipient 25 well dated. As Shoshenq III's 8<sup>th</sup> year and Takeloth II's incomplete 26<sup>th</sup> now fall in 822 BC, their accessions will have fallen in 829 BC (Shoshenq III) and in 847 BC (Takeloth II). Why, we may ask, did Shoshenq III seek to become king in about Year 19 of Takeloth II? The politics of the time may hold the answer. In his Year 15 (to cite his son, Prince Osorkon) a cataclysm of revolt (*i.e.*, from the Theban South) burst upon the land, with years of war. As high priests of Amun were in effect (and by titles) also governors of Upper Egypt, the years 15–19 probably saw the Thebans in danger of taking over the entire Nile valley south of Memphis, at least south from Heracleopolis and Teudjoi (El-Hibeh), as the resistance by Takeloth II and his son proved unavailing. In short, the senior (22<sup>nd</sup>) Dynasty was in danger of losing everything south of the Delta, and maybe even control there. In this crisis, the younger man Shoshenq seized control of the armed forces, pushed his father (?Takeloth II) and brother (?Prince Osorkon) aside, and took two forms of action: (i) stopped the opposition in their tracks, and (ii) negotiated a peace, to the satisfaction of the Thebans. Little wonder that Prince Osorkon was in limbo for some years, while Harsiese B took control in the South. Having saved the day, Shoshenq (III) then assumed the kingship as full coregent to Takeloth II – an arrangement that then lasted nearly 8 years, quite a good overlap.

Shoshenq III reigned 39 years overall, not 52 – which includes (for us) a 13-year span for a Shoshenq IV (Year 10 attested); cf. long since, *ThIPd-3*, xxv-xxvi, §Y. Then, with successive Apis-burials, 6 years of Pimay and 37 years of Shoshenq V, down to c. 735 BC, and all gone before Pi(ankh)y found Osorkon IV in possession at Bubastis (and Tanis) in 730. The latter king is attested by our Near-Eastern sources for 726 and 720 as already noted. On plain arithmetic during 735–715 (tine of Shabako's arrival), he may have 20 years' reign, coeval finally with Bakenranef,

and an Apis-bull that lived some 20/21 years.

§16. If we go back to the period before Takeloth II and 847 BC, only a few minor adjustments are needed to our former dates for Shoshenq I to Osorkon II. The biggest change concerns Osorkon II. If we accept Broekman's thesis (already cited above) on the currency of spellings of Hapi, and thus the attribution of Nile-level text 14 to a Year 29 for Osorkon II, which is only about 5/6 years more than the old 23/24 years' estimate [unlike wild estimates of 40/45 years], then we can go one small step further. Well-known are the jubilee-reliefs of Osorkon II from Bubastis – and the curious dateline of Year 22. May I suggest that this is a slip in transcribing from the hieratic? The two strokes are a slip for a third “10”-sign, its top having been damaged in the hieratic draft, leaving only the two vertical strokes, such that we now have (on the stone) just “22” for “30”. The date “22” for a *sed*-festival is wholly anomalous; this suggestion would rid us of the anomaly, and confirm a 30-year reign for Osorkon II, after which he probably died in his 31<sup>st</sup> year; in 847, his accession would then have been in 877. Then we may assign Takeloth I just 13 full years (as in Manetho), dying in the 14<sup>th</sup>, so in 890–877 BC. In turn if Manetho's 15 >\*35 years for Osorkon I are rounded up from a full 34 years (dying in 35<sup>th</sup>), Osorkon I can now be set at 924–890 BC, leaving Shoshenq I where he belongs, in 945–924 BC.

All of this will have beneficial effects in rejuvenating some of the “elderly” people in the mid-22<sup>nd</sup> Dynasty, including Prince Osorkon. If he were about 16/20 in 837 (11<sup>th</sup> year of Takeloth II), then in 791 (39<sup>th</sup> year of Shoshenq III) he would have been about 62/66 – a perfectly reasonable age, soon after attaining which, he probably died. There is still no clear case for confusing him with the later Osorkon III.

In Excursus II, there can be found a fresh set of dates to set out the revised set of reigns for our period, now taking on board not only my efforts, but drawing also on recent work (Aston, etc.) and different approaches while eliminating some of the exaggerations and misunderstandings of these recent years.

§17. We now come, finally, to the 21<sup>st</sup> Dynasty and transition to the 22<sup>nd</sup>, thankfully more briefly. First, the error of imposing an imaginary coregency on Psusennes II and Shoshenq I. This has already been fully refuted by me in *ThIPd-3*, xix–xxii, §§O–R. Let me here make just one deci-

sive point. The Thebans, already, did *not* want Shoshenq I as their new ruler, at the death of Psusennes II. And so in Year 2 of the new king, they rebelliously *refused* to accept his kingly status, dating an item in the Karnak Priestly Annals, “Year 2, 3<sup>rd</sup> month of Akhet, day 17, of the **Great Chief of the Ma, Shoshe(n)q (the foreigner)**, justified...”!<sup>13</sup> If Psusennes II had still been alive (in a coregency), they could have got out of their dilemma simply by citing the year-number of Psusennes II. He was dead and gone – hence they had *no* way of dating except by the rule of the new foreign chief. There was no coregent to date by. Full stop. Could anything be clearer? Shoshenq I knew he had to convince the Thebans of his good intentions; hence, he showed much devotion to their last leader, dedicating items to him, associating their names, etc. – but (as so often in such cases) this was all *post-mortem* propaganda. The early prenomen Maatkheperre for Shoshenq I (dedication for Psusennes II<sup>14</sup>) was quickly replaced (not later than Year 5) by the normative Hedjkheperre, as it politically associated Shoshenq I with the founder of the (21st) Dynasty of Psusennes II. At the latest, Psusennes might have died later in Year 1 of Shoshenq, leaving him as sole ruler in Year 2. But a \*10-month “coregency” is of practically no chronological value, and in fact the whole fantasy needs to be laid to rest.

§18. That being so, we may simply note for the 21<sup>st</sup> Dynasty overall that its 7 kings reigned as follows: Smendes I, 26 years; Amenemnisu, 4 years; Psusennes I, 48 years, last 2 years coregent with next; Amenemope, 9 years; Osorkon the Elder, 6 years; Siamun, 19 years, and (Har)-Psusennes II, 13, 14, or 15 years. Ending in 945 BC (accession of Shoshenq I), and allowing for a 2-year coregency, these figures total 123/124/125 years back to the beginning of the 21<sup>st</sup> Dynasty in c. 1068/1069/1070 BC, respectively. There is no obvious choice as to which figure should be preferred for Psusennes II. Africanus (often preferable) has 14 years, while Eusebius has 35 for \*15

years; the highest preserved date is a possible Year 13. The latter would provide an absolute minimum; Africanus, a mean value; Eusebius possibly a rounding-up. Probably 14 years, 124 years for the Dynasty (hence 1069) are the best as well as the mean; but the higher figure is possible, and yields a ‘round date’ (1070), easy on the memory. *Chacun à son gout*, as a Viennese operetta says! In any case, it indicates that the New Kingdom (at the death of Ramesses XI) ended in (or soon after) 1070 BC. Therefore we here end our inquest on the 1<sup>st</sup> millennium 1070–664 BC; there is good material to construct a closely correct chronology (within about 5 years’ margin of error) for (i) the 21<sup>st</sup> Dynasty on its own, (ii) for the 22<sup>nd</sup>/23<sup>rd</sup>/24<sup>th</sup> Dynasties within a frame of c. 945 (max.) down to c. 715, and tolerating minor internal variant interpretations, and (iii) closely correct dates for the 25<sup>th</sup> Dynasty to its end in N. Egypt in 664 BC, with the advent of the Saite 26<sup>th</sup> Dynasty.

#### LATER 2<sup>nd</sup> MILLENNIUM BC (c.1550/30–c.1070)

§19. On the New Kingdom, I shall be brutally brief, on the fault-lines between strengths and weaknesses. Particularly, as I devoted close attention to that period in the previous SCIEM meeting (May–June, 2003), which paper is currently in press, and before that in the initial paper at the SCIEM meeting in November 1996, published in 2000.<sup>15</sup>

The essence of the matter for the 18<sup>th</sup>–20<sup>th</sup> Dynasties is threefold. (i) We have regnal-year data on almost all reigns, but NOT in all cases for reign-lengths down to each king’s decease. We need another dozen ostraca, like the famous one that records the decease of Sethos II in his 6<sup>th</sup> year, directly followed by the announcement of his successor, (Ramesses) Siptah. Documents of this type for the transits between Tuthmosis I and II, Tuthmosis II and III, Haremhab and Ramesses I, and especially Sethos I and Ramesses II would go far to settle the practical length of the New Kingdom. In the 20<sup>th</sup> Dynasty, such transits

<sup>13</sup> Published, J.-M. KRUCHTEN, *Les annales des prêtres de Karnak...*, 1989, 49–50, pls. 3, 18, text 4b.

<sup>14</sup> Cf. JANSEN-WINKELN, *JEA* 81(1995), 147 fig. 5 and pl. XIII:2.

<sup>15</sup> See KITCHEN, in: M. BIETAK (ed.), *The Synchronisation of Civilisations in the Eastern Mediterranean in the Second Millennium B.C.*, Vienna 2000, 39–52; on the inadequacy of

absolutely minimal dates based on using last-but-one years of pharaohs as being always their highest dates, see in particular 41–44, with the constraints given us by Near-Eastern synchronisms against such ultra compression. This also warns us against applying such ultra-low calculations to the Third Intermediate Period also (cf. *ibid.*, 39–41).

between Ramesses VI/VII, VII/VIII, VIII/IX, X/XI and XI/Smendes I would also help to define our dates there with close conviction. As it is, our surviving data take us a long way, but leave us a decade or two short in detail. (ii) The impact of synchronisms with the Near East has always to be quantified with care; cf. my 2003 paper, and in briefer definition, the role of two Mesopotamian links: (a) the peace-treaty of Ramesses II (Year 21) and Hattusil III being *after* the latest-likely date for Kadashman-Turgu's offer (within c. 1282/64, low date) of military help to the latter against the former; and (b) the synchronisms of Assur-uballit I and Burnaburiash II with each other and Amenophis III, IV and Tutankhamun. These prevent us from accepting Egyptian dates that are too low, because we do not have data for their full lengths. (iii) There is the possibility of astronomical data, for "fine tuning" of dates already approximately fixed. In 2003, the net result of thrashing through the data was to have two sets of dates 10 years apart, because of the Assyrian problem of either 13 or 3 years for Ninurta-apil-ekur. The higher (via complex synchronisms) favours the currently traditional accession-dates of 1479 and 1279 respectively for Tuthmosis III and Ramesses II, and all that goes with these down to c. 1070; the lower (via ditto synchronisms) would favour corresponding dates about 10 years lower. A 10-year margin of error for events of three and a half millennia ago may irritate us, but it is not a bad standard! The beginning of the 18<sup>th</sup> Dynasty (beyond 1479) is further bedevilled by inadequate figures for Tuthmosis I and II (another 10/15-year source of error). But there is no reason to begin the 18<sup>th</sup> Dynasty/New Kingdom before c. 1550/40 BC, or later than 1540/30 BC. A "mean" date is c. 1540. The impact of Santorini on dating the New Kingdom is zero, given the unreliable state of the volcanic data.

**THE EARLY 2<sup>nd</sup> MILLENNIUM  
(c. 2100–1550/40 BC), AND EARLIER EPOCHS**

§20. Here, I shall be even briefer. From an intelligent dead reckoning of all rulers who successively reigned over Thebes between the 12<sup>th</sup> and 18<sup>th</sup>

Dynasties, it is possible to estimate a terminal date for the 12<sup>th</sup> Dynasty (Middle Kingdom) at c. 1790 BC (between c. 1800 and 1780), and to set its beginning c. 1980/70 (12<sup>th</sup> Dynasty likely at c. 1973–1795), with the 11<sup>th</sup> Dynasty (143 years) back to c. 2130/2120 roughly (or c. 2116–1973). Use of the Sothic date (c. 1866 BC) in the 12<sup>th</sup> Dynasty confirms this picture, possibly fine-tuned with lunar data. Synchronisms abroad do not yet fix things further, except for close-dated sites like Tell el-Dab<sup>a</sup> implying closer "fixes" for the Levant and perhaps the Aegean.

§21. For the Archaic Period, Old Kingdom and the 1<sup>st</sup> Intermediate Period, the fault-lines are as ever, the inadequacy of our regnal data, lack of good synchronisms and of most suitable science-based data, plus the uncertain links between the last Old-Kingdom dynasties and the 11<sup>th</sup> in the Middle Kingdom. More data are needed in each case. It is likely that after the 8<sup>th</sup> Dynasty, the 9<sup>th</sup> initially reigned over all Egypt under Khety I (Meribre) and probably his first two successors, the second being Neferkare, spelt "Kaneferre" in the fashion of that epoch, in an Upper-Egyptian tomb-chapel at Moalla. In that case, these three reigns at between 20 and 50 years' guessed total would separate the rise of the rebel 11<sup>th</sup> Dynasty from the fall of the Old Kingdom (8<sup>th</sup> Dynasty by that amount), setting the end of the Old Kingdom and 8<sup>th</sup> Dynasty at 2116 + 20/50 years = somewhere about 2166/2136 BC. If the 9<sup>th</sup>/10<sup>th</sup> Dynasties lasted through the first five reigns of the 11<sup>th</sup> Dynasty down to c. Year 30 of Mentuhotep II, c. 2012 BC, then about 104 years of the 11<sup>th</sup> Dynasty and 20/50 years before it would give roughly 120/160 years to the 18 Heracleopolitan rulers (cf. my 113 years in 2000!). Then the Old Kingdom and Archaic Periods respectively would run back respectively to c. 2700 and to around 3100/3000 BC for the 1<sup>st</sup> Dynasty in Egypt, as suggested since 2000, within up to 200 years margin of error (as it did, a decade ago; cf. the SCIEM volume issued in 2000), and seems likely to remain in that state. Some good dendrochronology might help for these very early historical periods!

**EXCURSUS I: Ready-Reckoner - New Libyan Chronology A [Tak II 25 yrs as sole kg]  
and New Libyan Chronology B [Os II 31 y; Tak II, Sh III c/r.]**

1. First Segment (945–856 BC) **common to both Options**

BC	Dyn. 22 - main line	Dyn. 23, etc.	HPAs of Amun, etc.	BC
945: 1	acc. Shoshenq I			945
944: 2				
943: 3				
942: 4				
941: 5				
940: 6				940
939: 7				
938: 8				
937: 9				
936:10			Iuput A, HPA	
935:11				935
934:12				
933:13				
932:14				
931:15				
930:16				930
929:17				
928:18				
927:19				
926:20	Yr. 5, Rehoboam, Judah			
925:21			Iuput A, HPA	925
924:22/1	acc. Osorkon I			
923: 2				
922: 3				
921: 4				
920: 5			("Shoshenq II", HPA?)	920
919: 6				
918: 7				
917: 8				
916: 9				
915:10				915
914:11				
913:12				
912:13				
911:14				
910:15				910
909:16				
908:17				
907:18				
906:19				
905:20				905
904:21	(Osorkon I, contd.)			
903:22				
902:23				
901:24				
900:25				900

BC	Dyn. 22 - main line	Dyn. 23, etc.	HPAs of Amun, etc.	BC
899:26				
898:27				
897:28				
896:29				
895:30				895
894:31				
893:32				
892:33	(Shoshenq II, co-regent?)			
891:34	( " , died?)			
890:35/1	acc. Takeloth I			890
889: 2				
888: 3				
887: 4				
886: 5			Iuwelot, HPA, Thebes	
885: 6				885
884: 7				
883: 8			Smendes III, HPA	
882: 9				
881:10				
880:11				880
879:12				
878:13				
877:14/1	acc. Osorkon II		Smendes III, HPA Yr. 14	
876: 2				
875: 3				875
874: 4				
873: 5				
872: 6				
871: 7				
870: 8				870
869: 9				
868:10				
867:11				
866:12				
865:13			(Harsiese A in Thebes?)	865
864:14				
863:15				
862:16				
861:17			Nimlot C, HPA in Thebes	
860:18				860
859:19	(Osorkon II, contd.)			
858:20				
857:21				

Ready-Reckoner - New Libyan Chronology A

[Tak II 25 yrs as sole kg]

2. T. II Sole Reign Option & Consequences (856–756 BC)

BC	Dyn. 22 - main line	Dyn. 23, etc.	HPAs of Amun, etc.	BC
856:22	[date of jubilee(?)]			
855:23				855
854:24				
853:25	B of Qarqar; jar to Israel			
852:26/1	acc. Takeloth II			
851: 2				
850: 3			(Takelot F HPA, Thebes?)	850
849: 4				
848: 5				
847: 6				
846: 7				
845: 8				845
844: 9				
843:10				
842:11	Prince Osorkon > HPA		Prince Osorkon > HPA	
841:12			Pr Os in Thebes	
840:13				840
839:14				
838:15	"Cataclysm" (from S.)		[ X, son of Harsiese B?]	
837:16				
836:17				
835:18				835
834:19				
833:20				
832:21				
831:22				
830:23				830
829:24			Pr Os > Thebes	
828:25			T II's d as Th recluse; PrO	
827:26/1	acc. Shoshenq III			
826: 2				
825: 3				825
824: 4				
823: 5				
822/ 6			Harsiese B in Thebes	
821: 7		<b>Dyn. 23:</b>		
820:8		= 1/acc. Pedubast I	(Pr Os out; Harsiese B in]	820
819: 9		2	" "	
818:10		3	" "	
817:11		4	" "	
816:12	Nile level Yr. 12 = Yr. 5	5	" "	
815:13		6	" "	815
814:14	(Shoshenq III, contd.)	7 (Pedubast I, contd.)	" "	
813:15		8	" "	
812:16		9	" "	
811:17		10	" "	
810:18		11	" "	810
809:19		12	" "	
808:20		13	" "	
807:21		14	" "	
806:22		15 = Yr. 1, Iuput I, c/r.	Pr Os back to Thebes	

Ready-Reckoner - New Libyan Chronology B

[Os II 31 y; Tak II, Sh III c/r.]

2. T. II c/r with Sh. III: Option & Consequences (856–756)

BC	Dyn. 22 - main line	Dyn. 23, etc.	HPAs of Amun, etc.	BC
856:22	[wrong date of jubilee?]			
855:23				855
854:24				
853:25	B of Qarqar; jar to Israel			
852:26				
851:27				
850:28			(Takelot F HPA, Thebes?)	850
849:29				
848:30	true date of jubilee?			
847:31/1	acc. Takeloth II			
846: 2				
845: 3				845
844: 4				
843: 5				
842: 6				
841: 7				
840: 8			[ X, son of Harsiese B?]	840
839: 9				
838:10				
837:11	Prince Osorkon > HPA		Pr Os in Thebes	
836:12			Pr Os in Thebes	
835:13				835
834:14				
833:15	"Cataclysm" - revolt in S		[revolt by Harsiese B]	
832:16	- crisis		[Upper Egypt lost to TII]	
831:17	- crisis		[..... ditto .....	
830:18	- crisis		[..... ditto .....	830
829:19/1	acc. Shoshenq III		[Sh III > peace with S?]	
828:20/2			[Harsiese B left in Th?]	
827:21/3			[.... ditto?....]	
826:22/4			Pr Os > Thebes	
825:23/5			Harsiese B in Thebes	825
824:24/6			Pr Os in Thebes	
823/25/7		<b>Dyn. 23:</b>	T II's d a Th recluse PrOs	
822:26/8	death of Takeloth II	= 1/acc. Pedubast I	(Pr Os out; Harsiese B in]	
821: 9	(Sh. III, contd.)	2	" "	
820:10		3	" "	820
819:11		4	" "	
818:12	Nile level Yr. 12 = Yr. 5	5	" "	
817:13		6	" "	
816:14		7	" "	
815:15		8	" "	815
814:16	(Shoshenq III, contd.)	9 (Pedubast I, contd.)	" "	
813:17		10	" "	
812:18		11	" "	
811:19		12	" "	
810:20		13	" "	810
809:21		14	" "	

## 2. T. II Sole Reign Option &amp; Consequences (856–756 BC)

BC	Dyn. 22 - main line	Dyn. 23, etc.	HPAs of Amun, etc.	BC
805:23		16 = Yr. 2, Iuput I, c/r.	Pr Os back to Thebes	805
804:24		17	" "	
803:25		18	Harsiese B in Thebes	
802:26		19	Harsiese B in Thebes	
801:27		20		
800:28		21		800
799:29		22		
798:30		23	Takeloth HPA in Thebes	
797:31		24		
796:32		25		
795:33		26/1 acc. Shoshenq VI		795
794:34		2		
793:35		3		
792:36		4		
791:37		5		
790: 38		6	Takeloth HPA in Thebes	790
789: 39		7/1 acc. Osorkon III	(Pr Os last visit, Thebes)	
788:40/1	acc. Shoshenq IV	2		
787: 2		3		
786: 3		4		
785: 4		5		785
784: 5		6		
783: 6		7		
782: 7		8		
781: 8		9		
780: 9		10		780
779:10		11		
778:11/1	acc. Pimay	12		
777: 2		13	Takeloth G (> III), HPA	
776: 3		14		
775: 4		15		775
774: 5		16		
773: 6		17		
772: 7/1	acc. Shoshenq V	19		
771: 2		19		
770: 3		20		770
769: 4	(Shoshenq V, contd.)	21		
768: 5		22		
767: 6		23		
766: 7		24/+1 Takeloth III c/r.		
765: 8		25/+2 Tak. III		765
764: 9		26/+3 Tak. III		
763:10		27/+4 Tak. III		
762:11		28/+5 Tak. III		
761:12		29/+6 Tak. III > sole kg		
760:13		7 Tak. III	Osorkon F, HPA ?	760
759:14		8/1 acc. Rudamun		
758:15		2		
757:16		3		

## 2. T. II c/r with Sh. III: Option &amp; Consequences (856–756)

BC	Dyn. 22 - main line	Dyn. 23, etc.	HPAs of Amun, etc.	BC
808:22		15 = Yr. 1, Iuput I, c/r.	Pr Os back to Thebes	
807:23		16 = Yr. 2, Iuput I, c/r.		
806:24		17	" "	
805:25		18	Harsiese B	805
804:26		19	Harsiese B	
803:27		20		
802:28		21	Pr Os back to Thebes	
801:29		22	" "	
800:30		23	Takeloth HPA in Thebes	800
799:31		24		
798:32		25		
797:33		26/1 acc. Shoshenq VI		
796:34		2		
795:35		3		795
794:36		4		
793:37		5		
792:38		6	Takeloth HPA in Thebes	
791:39		7/1 acc. Osorkon III	(Pr Os last visit, Thebes)	
790:40/1	acc. Shoshenq IV	2		790
789: 2		3		
788: 3		4		
787: 4		5		
786: 5		6		
785: 6		7		785
784: 7		8		
783: 8		9		
782: 9		10		
781:10		11		
780:11		12		780
779:12		13	Takeloth G > III, HPA	
778:13/1	acc. Pimay	14		
777: 2		15		
776: 3		16		
775: 4		17		775
774: 5		18		
773: 6		19		
772: 7/1	acc. Shoshenq V	20		
771: 2		21		
770: 3		22		770
769: 4	(Shoshenq V, contd.)	23		
768: 5		24/+1 Takeloth III c/r.		
767: 6		25/+2 Tak. III		
766: 7		26/+3 Tak. III		
765: 8		27/+4 Tak. III		765
764: 9		28/+5 Tak. III		
763:10		29/+6 Tak. III > sole kg		
762:11		7 Tak. III		
761:12		8/1 acc. Rudamun		
760:13		2	Osorkon F, HPA ?	760
759:14		3	*	
758:15		4		
757:16		5		

Ready-Reckoner - New Libyan Chronology A [Tak II 25 yrs as sole kg]  
and New Libyan Chronology B [Os II 31 y; Tak II, Sh III c/r.]

3. Final Segment (756–664 BC) **common to both Options**

BC	Dyn. 22 - main line	Dyn. 23, etc.	HPAs of Amun, etc.	BC
756:17		4/1 acc. Shoshenq VII		
755:18		2		755
754:19		3		
753:20		4		
752:21		5		
751:22		6		
750:23		7	<b>Dyn. 25</b>	750
749:24		8	x/1 acc. Pi(ankh)y	
748:25		9	2	
747:26		10	3	
746:27		11	4	
745:28		12	5	745
744:29		13	6	
743:30		14	7	
742:31		15	8	
741:32		16	9	
740:33		17	10	740
739:34		18	11	
738:35		19 GW Shepenupt I	12 GW Amenirdis I	
737:36		20	13	
736:37		21/ 1 acc. Iuput II	14	
735:38/1	acc. Osorkon IV	2	15	735
734: 2		3	16	
733: 3		4	17	
732: 4		5	18	
731: 5		6	19	
730: 6		7	20 P in Egypt	730
729: 7		8	21 (Gt. Stela);	
728: 8		9	22/1 Tefnakht as "king"	
727: 9		10	23/2 Tefnakht	
726:10		11	24/3 Tefnakht	
725:11	(plea, < Hosea of Israel)	12	25/4 Tefnakht	725
724:12	(Osorkon IV, contd.)	13 (Iuput II, contd.)	26/5 (P & T, ctd.)	
723:13		14	27/6 Tefnakht	
722:14		15	28/7 Tefnakht	
721:15		16	29/8 Tefnakht	
720:16	(gift > Sargon II)	17	30/9/1 acc. Bakenranef	720
719:17		18	31/2 Bak	
718:18		19	32/3 Bak	
717:19		20	33/4 Bak.	
716:20/1		21	5 BK/ 34 P/1/acc. Sh, Nb	
715:21/2	Shabako in Egypt Shbtk Nb	22/2(Shabako into Eg.)	6 Bakenranef (end)	715
714: 3				
713: 4				
712: 5				

BC	Dyn. 22 - main line	Dyn. 23, etc.	HPAs of Amun, etc.	BC
711: 6				
710: 7				710
709: 8				
708: 9				
707:10				
706:11	(Sargon sent to Shbtk, Nub)			
705:12				705
704:13				
703:14				
702:15/1	acc. Shebitku; Thrqa in Nub			
701: 2	(T sent to Palestine)			
700: 3				700
699: 4				
698: 5				
697: 6				
696: 7				
695: 8				695
694: 9				
693:10				
692:11				
691:12				
690:13/1	acc. Taharqa in Egypt			690
689: 2				
688: 3				
687: 4				
686: 5				
685: 6				685
684: 7				
683: 8				
682: 9				
681:10				
680:11				680
679:12	(Taharqa, contd.)			679
678:13				
677:14				
676:15				
675:16				675
674:17				
673:18				
672:19				
671:20				
670:21				670
669:22				
668:23				
667:24				
666:25				
665:26				665
664:27/1 /1	acc. Tantamani; acc. Psamtek I (Dyn. 26)			

**EXCURSUS II: Summary Revised Dates for Dynasties 22–25**  
**Option A**

Dates BC	Rulers	Yrs	Dates BC	Rulers	Yrs
	Dynasty 22			Dynasty 23	
945–924:	Shoshenq I	21	820–795:	Pedubast I	25
924–890:	Osorkon I	34	(c. 806/5:	Iuput I, c/r	2?)
(c.892/1:	Shoshenq II, c/r	2?)	795–789:	Shoshenq VI	6
890–877:	Takeloth I	13	789–761:	Osorkon III	28
877–852:	Osorkon II	25*	766–759:	Takeloth III, part c/r	7
( c.865?	Harsiese A	–)	759–756:	Rudamun	3*
852–827:	Takeloth II	25		As in Option B:–	
827–788:	Shoshenq III	39	756–736:	Shoshenq VII	20
788–778:	Shoshenq IV	10*	736–715:	Iuput II	21
778–772:	Pimay	6		Dynasty 24	
772–735:	Shoshenq V	37	728–720:	Tefnakht (king)	8
735–715:	Osorkon IV	20	720–715:	Bakeranef	5

Asterisks (\*) denote year-numbers that differ from the T.II/Sh III overlap table, A

Dates BC	Rulers in (N) Egypt	Yrs	Adjoint Rulers in Kush
Dynasty 25			
749–716:	Pi(ankh)y (Kush & Thebaid )	33	
716–702:	Shabako (715ff. in Egypt)	14	Shebitku (715–702)
702–690:	Shebitku	12	Taharqa (702–690)
690–664:	Taharqa	26	(X, then Tantamani? – x/y–664)

**Summary Revised Dates for Dynasties 22–25**  
**Option B**

Dates BC	Rulers	Yrs	Dates BC	Rulers	Yrs
	Dynasty 22			Dynasty 23	
945–924:	Shoshenq I	21	822–797:	Pedubast I	25
924–890:	Osorkon I	34	(c. 808/7:	Iuput I, c/r	2?)
(c. 892/1:	Shoshenq II, c/r	2?)	797–791:	Shoshenq VI	6
890–877:	Takeloth I	13	791–763:	Osorkon III	28
877–847:	Osorkon II	30*	768–761:	Takeloth III, part c/r	7
( c.865?	Harsiese A	–)	761–756:	Rudamun	5*
847–822:	Takeloth II	25		As in Option A:–	
829–790:	Shoshenq III (part c/r)	39	756–736:	Shoshenq VII	20
790–778:	Shoshenq IV	12*	736–715:	Iuput II	21
778–772:	Pimay	6		Dynasty 24	
772–735:	Shoshenq V	37	728–720:	Tefnakht (king)	8
735–715:	Osorkon IV	20	720–715:	Bakeranef	5

Asterisks (\*) denote year-numbers that differ from the T.II sole reign table

Dates BC	Rulers in (N) Egypt	Yrs	Adjoint Rulers in Kush
Dynasty 25			
749–716:	Pi(ankh)y (Kush & Thebaid )	33	
716–702:	Shabako (715ff. in Egypt)	14	Shebitku (715–702)
702–690:	Shebitku	12	Taharqa (702–690)
690–664:	Taharqa	26	(X, then Tantamani? – x/y–664)